

## PATENT COOPERATION TREATY

REC'D 14 DEC 2000

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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

|   |  |   |
|---|--|---|
| Applicant's or agent's file reference<br>7473/MH  | <b>FOR FURTHER ACTION</b>                                | See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |
| International application No.<br>PCT/US00/06606   | International filing date (day/month/year)<br>14/03/2000 | Priority date (day/month/year)<br>15/03/1999  |
| International Patent Classification (IPC) or national classification and IPC<br>C11D1/02  |  |   |
| <p>Applicant<br/>THE PROCTER &amp; GAMBLE COMPANY et al.</p> <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>  |  |   |
| <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I    <input checked="" type="checkbox"/> Basis of the report</li> <li>II   <input type="checkbox"/> Priority</li> <li>III   <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV   <input type="checkbox"/> Lack of unity of invention</li> <li>V   <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI   <input type="checkbox"/> Certain documents cited</li> <li>VII   <input checked="" type="checkbox"/> Certain defects in the international application</li> <li>VIII   <input checked="" type="checkbox"/> Certain observations on the international application</li> </ul> |  |   |

|  |  |
|--|--|
| Date of submission of the demand<br>07/09/2000   | Date of completion of this report<br>12.12.2000                          |
| Name and mailing address of the international preliminary examining authority:<br><br>European Patent Office<br>D-80298 Munich<br>Tel. +49 89 2399 - 0 Tx: 523656 epmu d<br>Fax: +49 89 2399 - 4465 | Authorized officer<br><br>Irwin, L<br><br>Telephone No. +49 89 2399 2527 |



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US00/06606

**I. Basis of the report**

1. This report has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17.)*):

**Description, pages:**

1-30                   as originally filed

**Claims, No.:**

1-10                   as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description,               pages:
- the claims,                   Nos.:
- the drawings,               sheets:

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US00/06606

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)                  Yes: Claims 1 - 10  
                                No: Claims

Inventive step (IS)           Yes: Claims 1 - 10  
                                No: Claims

Industrial applicability (IA)   Yes: Claims 1 - 10  
                                No: Claims

2. Citations and explanations  
**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/06606

**Re Item V**

**Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

The following document is cited:

D1: WO 97 06235 A (PROCTER & GAMBLE) 20 February 1997 (1997-02-20)

**Novelty:**

- V.i. The subject matter of the independent claim 1 is considered to be novel since the use of odour neutralisers that form Schiff bases upon reaction with an amine have not been disclosed in the above cited prior art. Although the Schiff reaction between an aldehyde and an amine is well known, it has not been previously incorporated into a detergent hand dish washing composition in order to reduce the malodours coming from the amine surfactants. Some of these compounds can act as fragrances as well as being themselves an odour neutraliser.
- V.ii. Consequently the subject matter of the dependent claims 2 - 6 is also novel.
- V.iii. The subject matter of the independent claim 7 is also considered to be novel since the method of using a Schiff reaction in order to neutralise malodours emanating from the amines present in a hand dish washing detergent composition has not been previously disclosed in the cited prior art.
- V.iv. Likewise the dependent claims 8 - 10 are also considered to be novel.
- V.v. Therefore the claims 1 - 10 are considered to be novel. *Art. 33(2) PCT.*

**Inventive Step:**

- V.vi. The closest prior art document is D1 since this document also discloses detergent compositions comprising amines and perfume components that reduce the malodour of the amines.

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US00/06606

V.vii. Therefore the technical problem of the present invention has been formulated as: "How to provide an alternative method for reducing the malodours generated from amine surfactants that must be present since they are effective detergent surfactants".

V.viii. The present application uses fragrance materials that mask the amine malodours by providing scents that compete with the malodours in the detergent composition for access to the nasal receptor sites. These fragrance materials mask the malodours by:

- (i) reducing the amount of time that the scents emanating from the fragrances require to diffuse into the air, and
- (ii) increasing the potency of the scent or decreasing that of the malodour.

V.ix. Since the use of a compound capable of forming a Schiff's base upon reaction with the amines in the detergent composition has not been previously disclosed, the subject matter of the claims 1 - 10 is considered to be inventive. *Art. 33(3) PCT.*

**Re Item VII**

**Certain defects in the international application**

VII.i. Contrary to the requirements of Rule 5.1(a)(ii) of the PCT, the relevant background art disclosed in document D1 is not mentioned in the description, nor is this document identified therein.

VII.ii. The phrase "... herein incorporated by reference" as used for example in the description on page 3 (line 18), is an expression not to be used since it renders the extent of the protection unclear (Guidelines, PCT/GL/3 III, 4.3a).

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US00/06606

**Re Item VIII**

**Certain observations on the international application**

- VIII.i. The amounts of each respective component of the composition should be quoted in **weight. %** and not simply percentages.
- VIII.ii. Also in claim 1, the pH value should ideally be incorporated into the preamble part of the claim.

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

|   |   |  |
|---|---|--|
| Applicant's or agent's file reference<br><b>7473/MH</b>     | <b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. |  |
| International application No.<br><b>PCT/US 00/06606</b>     | International filing date (day/month/year)<br><b>14/03/2000</b>   | (Earliest) Priority Date (day/month/year)<br><b>15/03/1999</b> |
| Applicant<br><b>THE PROCTER &amp; GAMBLE COMPANY et al.</b> |   |  |

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2.  Certain claims were found unsearchable (See Box I).

3.  Unity of Invention is lacking (see Box II).

4. With regard to the title,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the abstract,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. \_\_\_\_\_

as suggested by the applicant.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

None of the figures.

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US 00/06606

**Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)**

Disclosed are detergent compositions, particularly for manual dishwashing which, by incorporating a combination of anionic surfactants, solvents and certain selected perfume compositions that do not have the malodors associated with certain nitrogenous ingredients such as amines. Also disclosed are the perfume compositions themselves, characterised by 30% to 100% of an odor neutralizer capable of forming a Schiff base when reacted with an anime, said compositions having a pI of from 8.5 to 12.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/06606

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C11D1/02 C11D3/43 C11D3/30 C11D3/50 C11D3/20

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages                 | Relevant to claim No. |
|----------|--|-----------------------|
| A        | WO 97 06235 A (PROCTER & GAMBLE)<br>20 February 1997 (1997-02-20)<br>abstract; claims 1,9<br>----- | 1-7                   |

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

## ° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

13 July 2000

Date of mailing of the international search report

25/07/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Saunders, T

**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International Application No

PCT/US 00/06606

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|--|------------------|-------------------------|------------------|
| WO 9706235                             | A 20-02-1997     | BR 9609985 A            | 12-01-1999       |
|  |                  | CA 2228966 A            | 20-02-1997       |
|  |                  | EP 0843719 A            | 27-05-1998       |
|  |                  | JP 11510541 T           | 14-09-1999       |

## PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION  
(PCT Rule 61.2)

To:

Assistant Commissioner for Patents  
 United States Patent and Trademark  
 Office  
 Box PCT  
 Washington, D.C.20231  
 ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

|  |  |
|--|--|
| Date of mailing (day/month/year)<br>23 October 2000 (23.10.00)         |  |
| International application No.<br>PCT/US00/06606                        | Applicant's or agent's file reference<br>7473/MH           |
| International filing date (day/month/year)<br>14 March 2000 (14.03.00) | Priority date (day/month/year)<br>15 March 1999 (15.03.99) |
| Applicant<br>KAISER, Carl, Eric et al                                  |  |

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

07 September 2000 (07.09.00)

in a notice effecting later election filed with the International Bureau on:

\_\_\_\_\_

2. The election  was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

|   |   |
|---|---|
| The International Bureau of WIPO<br>34, chemin des Colombettes<br>1211 Geneva 20, Switzerland | Authorized officer<br><br>R. E. Stoffel |
| Facsimile No.: (41-22) 740.14.35  | Telephone No.: (41-22) 338.83.38        |

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

|    |                          |    |                                       |    |   |    |                          |
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| CI | Côte d'Ivoire            | KP | Democratic People's Republic of Korea | PL | Poland                                    |    |                          |
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| CU | Cuba                     | LC | Saint Lucia                           | RU | Russian Federation                        |    |                          |
| CZ | Czech Republic           | LI | Liechtenstein                         | SD | Sudan                                     |    |                          |
| DE | Germany                  | LK | Sri Lanka                             | SE | Sweden                                    |    |                          |
| DK | Denmark                  | LR | Liberia                               | SG | Singapore                                 |    |                          |
| EE | Estonia                  |    |                                       |    |   |    |                          |

# INTERNATIONAL SEARCH REPORT

Int. Application No  
PCT/US 00/06606

| A. CLASSIFICATION OF SUBJECT MATTER |          |          |          |          |
|-------------------------------------|----------|----------|----------|----------|
| IPC 7                               | C11D1/02 | C11D3/43 | C11D3/30 | C11D3/50 |
|                                     |          |          |          | C11D3/20 |

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C11D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages                 | Relevant to claim No. |
|----------|--|-----------------------|
| A        | WO 97 06235 A (PROCTER & GAMBLE)<br>20 February 1997 (1997-02-20)<br>abstract; claims 1,9<br>----- | 1-7                   |

Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

### \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

13 July 2000

25/07/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Saunders, T

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/06606

| Patent document cited in search report | Publication date | Patent family member(s) |              | Publication date |
|--|------------------|-------------------------|--------------|------------------|
| WO 9706235 A                           | 20-02-1997       | BR 9609985 A            | CA 2228966 A | 12-01-1999       |